UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/496,069	02/01/2000	Ken Yoshimura	1924.63567	5672

7590 01/26/2005

Patrick G. Burns Esquire
Greer Burns & Crain Ltd
300 S WACKER DRIVE-SUITE 2500
Chicago, IL 60606

EXAMINER	
TANG, KENNETH	
ART UNIT	PAPER NUMBER
2127	

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/496,069	YOSHIMURA ET AL.	
	Examin r	Art Unit	
	Kenneth Tang	2127	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondenc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 September 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the Amendment filed on 9/2/04.

2. Claims 1-8 are presented for examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. In claim 1, "queue number" (line 4) is indefinite because it is unclear in the claim language whether this refers to a position in a queue, a data element (number) in a queue (that's compared with a threshold), a length of the queue, an identification of a particular queue out of a plurality of queues. In addition, a queue has not even been introduced in the claim language but a queue number is present. Moreover, it is indefinite because it is unclear in the claim language whether there is a single queue or a plurality of queues because neither a single nor a plurality of queues has been established. Furthermore, it is not understood how it is even possible to acquire information from a queue number (element in a queue representing information) and not a queue itself (data structure). The Examiner recommends the Applicant to introduce the queue (or a plurality of queues)

first and then clearly define how the queue number relates to the said queue (or plurality of queues) without having multiple interpretations.

b. In claim 1, "which is the number of programs, processes or demands" (line 3) is indefinite because it is not made explicitly clear in the claim language whether this (one of them or all three) refers to the utility rate or the information on a queue number, or both.

c. Claims 7 and 8 are rejected for the same indefinite reasons as stated in the rejection of claim 1 above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berry (US 5,668,944) in view of Applicant's Admitted Prior Art.

5. As to claim 1, Barry teaches a system diagnosis apparatus that diagnoses system resources of a computer system *(see Abstract and col. 1, lines 60-67)*, comprising:

- an acquisition unit which acquires information on a utility rate of the system resources *(col. 1, lines 39-41, col. 2, lines 1-4 and col. 14, lines 18-21 and lines 26-28)*;

- a memory unit that stores a threshold of the utility rate and a threshold of the queue number, wherein the thresholds represent the limits at which the system resources perform desired performances *(col. 2, lines 4-11 and 59-65, col. 15, lines 60-64)*;
- a diagnosis unit that diagnoses the performance of the system resource *(col. 3, lines 30-35 and col. 16, lines 58-65)*.
- wherein the system diagnosis apparatus transmits, to the computer system, information including upgrade recommendation information for replacing or adding to a system resource that is diagnosed to have low performance *(col. 2, lines 59-65)*.

Berry teaches information on a queue number, which is the number of programs, processes or demands of the system resources (by the performance diagnosis system that is coupled to the resource managers) *(e.g., col. 2, lines 59-67)* and comparing thresholds in order to determine the performance based on utility rate *(col. 14, lines 19-41 and col. 15, lines 42-64)* but fails to explicitly state that the diagnosis of the performance of the system consists of:

- system resource has lowered when the utility rate is higher than the threshold of the utility rate and the queue length is shorter than the threshold of the queue length, or diagnoses that the number of the system resources is insufficient when the utility rate is higher than the threshold of the utility rate and the queue length is longer than the threshold of the queue length.

However, Applicant's Admitted Prior Art discloses that the conditions that lower the performance of the CPU, for example, include high utility rate and long queue waiting for excecution process, and the conditions that lower the disk performance include high utility rate, long queue waiting and long response time *(see Specification, page 2, lines 16-25 through page*

3, lines 1-22) and that thresholds are used and compared to in order to define the limits. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the feature where the system resource has lowered when the utility rate is higher than the threshold of the utility rate and the queue length is shorter than the threshold of the queue length, or diagnoses that the number of the system resources is insufficient when the utility rate is higher than the threshold of the utility rate and the queue length is longer than the threshold of the queue length to the existing method and system of Berry because Applicant's Admitted Prior Art states that if high utility rate is the only cause of poor performance, then it is effective to replace the existing CPU with a better CPU. But if high utility rate and response time are the only causes, then it is effective to replace the existing disk with a better disk *(see Specification, page 3, lines 13-22)*.

6. As to claim 2, Berry teaches:

- a system resource determining unit which determines a system resource capable of giving the desired performance when it is diagnosed by the diagnosis unit that the performance of the system resource has lowered, or determines a number of the system resources capable of giving the desired performance when it is diagnosed by the system diagnosis unit that the number of the system resources is insufficient *(col. 2, lines 59-65)*;
- an ordering unit which orders the system resource determined by the system resource determining unit as the system resource for upgrading *(col. 2, lines 59-65)*.

7. As to claim 3, Berry teaches:

- where the ordering unit transmits, utilizing a network, the ordering information on the system resources to a device installed at the supplier of the system resources *(col. 4, line 50, col. 2, lines 42-52)*. The computer processor is a unit that makes the order.

8. As to claim 4, Berry inherently teaches:

- a notifying unit which notifies, utilizing a network, the result of diagnosis by said diagnosis unit to the user of the system *(col. 2, line 62 and col. 4, line 50)*.

9. As to claim 5, it is rejected for the same reasons as stated in claim 1. In addition, it is inherent that a flag is used to represent a boolean variable (necessity or not of upgrade).

10. As to claim 6, it is rejected for the same reasons as stated in the rejection of claim 1. In addition, Chen discloses that the response time is monitored in the system *(col. 16, lines 41-42)*.

11. As to claims 7 and 8, they are rejected for the same reasons as stated in the rejection of claim 1.

Response to Arguments

12. Applicant argues that Berry in view of AAPA does not teach transmitting upgrade recommendation information of a system resource.

In response, the Examiner respectfully disagrees. Berry teaches wherein the system diagnosis apparatus transmits, to the computer system, information including upgrade

recommendation information for replacing or adding to a system resource that is diagnosed to have low performance *(col. 2, lines 59-65)*.

13. Applicant argues that AAPA does not disclose or suggest a diagnosis apparatus or method which diagnoses the performance using a condition of the system resource and a queue, or more particularly the number of queues, or transmitting upgrade recommendation information of a system resource.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a plurality of "queues") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

14. Applicant argues that AAPA and Berry fails to disclose an ordering unit that orders a system resource that needs to be upgraded, or transmission of the ordering information to a device installed by a supplier of the system resources, as recited in claims 2 and 3, respectfully.

In response, the Examiner respectfully disagrees. Applicant makes this argument but provides no support for it. Applicant's arguments are not found to be persuasive and the Applicant is directed back to the rejections made of claims 2 and 3.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Tang whose telephone number is (571) 272-3772. The examiner can normally be reached on 8:30AM - 6:00PM, Every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kt
1/23/05

MENG-AL T. AN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100